SCHROTH® SCHROTH®

INSTALLATION & OPERATING INSTRUCTIONS

BMW E36 & E46 3 Series

BMW E39 5 Series

BMW MINI

Rallye 4 Harnessbelts

Safety through Technology

Edition 06/2002

Patents granted in
Patente wurden erteilt in

DE	3 735 077
GB	2 211 070
I	1 207 344
USA	4 854 608

TÜV Rheinland
GEPRÜFT UND ÜBERWACHT
TESTED AND INSPECTED

This manual contains important information as well as DANGERs, WARNINGs and SAFETY INSTRUCTIONs regarding the proper installation, effective use and maintenance of the SCHROTH harnessbelt. Please be sure to read and thoroughly understand its contents before beginning installation and before using the system. Follow all instructions and Safety Instructions carefully and be especially sure to heed all Da ngers and Warnings.

Always keep this manual in your car for reference and be sure to leave it with the car if you sell it with the harness belt system installed.

Important information and instructions in this manual are shown:

⚠ DANGER

DANGER deals with important points about the installation of the SCHROTH harnessbelt. Ignoring these warnings will create serious danger that can lead to serious personal injury or death.

⚠ WARNING

WARNINGS deal with important issues about installation, use, misuse or modification of the SCHROTH harnessbelt.

Ignoring these Warnings will significantly reduce the performance of the harness belt system. This can result in serious personal injury or death during an accident.

SAFETY INSTRUCTIONS

- Safety Instructions contain important hints to help you effectively install, use and maintain the SCHROTH harnessbelt.

Always carefully read and follow the information in this manual, especially those highlighted as above.

INSTALLATION & OPERATING INSTRUCTIONS

Approvals:
BMW E36, E46, E39, & MINI Rallye 4 Harnessbelts

USA:

Tested in accordance with applicable provisions of FMVSS 209

US model tested and inspected by

SALT LAKE CITY, UTAH

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Toll Free (888) 536-8550

Other Countries: see **www.schroth.com**

Congratulations!

With the purchase of this SCHROTH asm harnessbelt, you have chosen a sophisticated restraint system, which represents a further advance in harness restraint technology. Extensive research, testing and field experience has shown it to offer, when properly installed and worn, high levels of protection in head-on collisions.

SCHROTH BMW specific asm-Rallye 4 Series harnessbelts are only intended for installation at the left and right outboard front seating positions of designated BMW and MINI model passenger cars which have been specifically evaluated by SCHROTH engineers for anchor point locations and suitability of available front seats.

Before attempting installation, please first answer the following questions and carefully follow the instructions which accompany them.

⚠ WARNING

Restraint systems can only offer protection if they are properly installed and used.
To assure proper function, your car must meet special technical requirements.
Before installation of SCHROTH harnessbelt, please answer a few very important questions to make sure the SCHROTH harnessbelt system can be properly installed and effectively used in your car..

1. Is your vehicle a BMW 3 Series (E36) Coupe or Sedan manufactured from 1992 to 1999 – a BMW 3 Series (E46) Coupe or Sedan manufactured from 1999 to 2002 – a BMW 5 Series (E39) manufactured from 1996 to 2002 – or a BMW MINI manufactured from 2001?

YES ❒ NO ❒

⚠ WARNING

Proper harness belt geometry requires that seat belt anchor points be located within narrowly defined areas. Therefore SCHROTH harnessbelts may only be installed in SCHROTH approved vehicles for which proper anchorage location and belt geometry has been determined to exist.

2. Is your vehicle a BMW 3 Series (E36) Convertible manufactured from 1992 to 1999 OR a BMW 3 Series (E46) Convertible manufactured from 1999 to 2002?

YES ❒ NO ❒

⚠ WARNING

Anchorage locations for BMW E36 & E46 3 Series Convertibles differ from those of the Coupe and Sedan models. The Schroth BMW Rallye 4 Harnessbelts are not approved for use in convertible models due to the different mounting points provided from the factory. Please refer to the standard Schroth Certified Vehicle Reference List for the proper application for these models.

3. Have you maintained your original equipment factory provided seats and factory harness mounting points?

YES ❒ NO ❒

⚠ WARNING

These belts are only approved for use in the designated BMW model in conjunction with the factory provided seat and factory provided DOT mounting points. This belt must not be used if either the seat and/or the factory mounting locations or mounting hardware have been changed or modified in any way.

4. Do you have a left belt for the driver's side and/or a right belt for the passenger's side? (See illustrations on page 5.)

YES ❒ NO ❒

⚠ WARNING

Left and right belts are not interchangeable! Installation of harness belts on wrong side of vehicle can cause severe head injury or death during rebound phase of frontal collision! Make sure black asm-cartridge is on the inboard shoulder strap, see illustration on page 6.

If your answer to any of these 4 questions is [NO], do not install the SCHROTH harnessbelt system.

If you have answered <u>ALL</u> questions with [YES], you may install the SCHROTH harnessbelt system in your car.

Please remember that installation procedures will require you to perform a variety of operations requiring familiarity with tools and mechanical procedures. If you have any doubt about your ability to properly install the SCHROTH asm harnessbelt system, take this manual and all parts supplied to a competent mechanic for installation.

⚠ WARNING

Please follow these instructions carefully while installing and before using the belt! Failure to follow instructions can not only damage and reduce the performance of the system, but may also result in the denial of warranty claims.

SAFETY INSTRUCTIONS

- SCHROTH asm harnessbelts are designed to be installed in addition to the stock restraint systems. Always heed Country/State laws governing the use of seat belts.

⚠ WARNING

Be sure that the tail strap of the harness belt is not interfered with or misdirected by cargo or by folding rear seat.

This SCHROTH asm harnessbelt is only suitable for adults on front outboard seating positions.

SCHROTH asm harnessbelts are not intended or suited for use by children under 12 years of age, or persons who weigh less than 88 lbs (40 kg) or those who are less than 4'11" tall (1.50 meters), regardless of age. Such persons will not be adequately protected by the harness system and may receive more severe injury than would otherwise be expected.

SCHROTH U.S. model harnessbelts have been tested in accordance with performance parameters of Federal Motor Vehicle Safety Standard 209 with the exception of Paragraph S 4.6 (full scale impact testing as described in FMVSS 208). FMVSS 209 deals with lap and three point restraints and does not expressly refer to harness belts. SCHROTH has nevertheless applied the performance criteria specified in FMVSS 209 to the system to the extent applicable.

These belts, when properly installed and used according to applicable instructions can mitigate injury. The ability of any restraint system to mitigate or prevent injury is directly related to the type and severity of the accident. SCHROTH asm harnessbelts have been tested in dynamic sled tests utilizing a 75 kg (165 lbs) Hybrid II anthropometric dummy to simulate head-on collisions at 50 km/h (31 mph). They also have been dynamically tested utilizing a 75 kg mass dummy in accordance with European Safety Standard ECE-R 16.04.

SAFETY INSTRUCTIONS

- Always keep this manual in the vehicle so that others can thoroughly familiarize themselves with the proper use of the system.

PACKAGE CONTENTS

The contents of each package is as detailed in the table below for each belt.

BMW E36 Rallye 4 Left PN#s 16120 /16122		**BMW E36 Rallye 4 Right PN#s 16620/16622**	
BMW E36 Left Belt	1x	BMW E36 Right Belt	1x
Left side lap belt connector	1x	Right side lap belt connector	1x
SCHROTH asm sticker	1x	Left side tail strap connector	1x
SCHROTH Racing sticker	1x	SCHROTH asm sticker	1x
BMW Rallye 4 Install Inst.	1x	SCHROTH Racing sticker	1x
		BMW Rallye 4 Install Inst.	1x
BMW E46 Rallye 4 Left PN#s 16140/16142		**BMW E46 Rallye 4 Right PN#s 16640/16642**	
BMW E46 Left Belt	1x	BMW E46 Right Belt	1x
Left side lap belt connector	1x	Right side lap belt connector	1x
Left side tail strap connector	1x	Right side tail strap connector	1x
SCHROTH asm sticker	1x	SCHROTH asm sticker	1x
SCHROTH Racing sticker	1x	SCHROTH Racing sticker	1x
BMW Rallye 4 Install Inst.	1x	BMW Rallye 4 Install Inst.	1x
BMW E39 Rallye 4 Left PN#s 16130/16132		**BMW E39 Rallye 4 Right PN#s 16630/16632**	
BMW E39 Left Belt	1x	BMW E39 Right Belt	1x
Left side lap belt connector	1x	Right side lap belt connector	1x
Left side tail strap connector	1x	Right side tail strap connector	1x
SCHROTH asm sticker	1x	SCHROTH asm sticker	1x
SCHROTH Racing sticker	1x	SCHROTH Racing sticker	1x
BMW Rallye 4 Install Inst.	1x	BMW Rallye 4 Install Inst.	1x
BMW MINI Rallye 4 Left		**BMW MINI Rallye 4 Right**	
BMW MINI Left Belt	1x	BMW MINI Right Belt	1x
Left side lap belt connector	1x	Right side lap belt connector	1x
Left side tail strap connector	1x	Right side tail strap connector	1x
SCHROTH asm sticker	1x	SCHROTH asm sticker	1x
SCHROTH Racing sticker	1x	SCHROTH Racing sticker	1x
BMW Rallye 4 Install Inst.	1x	BMW Rallye 4 Install Inst.	1x

No additional installation hardware is required or provided. All BMW Rallye 4 belts use factory mounting bolts and/or factory provided female receptacles in conjunction with the factory provided belts.

MANUFACTURING INFORMATION

Each SCHROTH belt is manufactured to exacting standards. Specific manufacturing information of each belt is printed on the back side of the plastic **asm** cartridge cover.

US Version asm cover

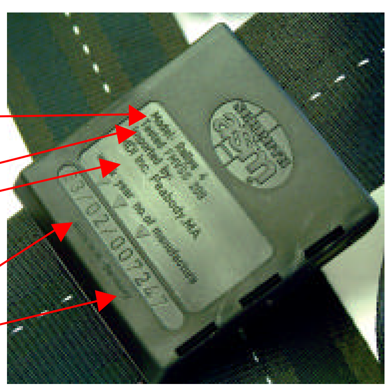
Type of belt

FMVSS Certification

Importer

Date of manufacture

Product number



INSTALLATION INSTRUCTIONS

1 General Instructions

Always leave original equipment seat belts in place and available for use.

We strongly recommend that you leave in place all BMW factory provided 3-point restraint systems originally supplied for the front and rear seating positions of your vehicle when you install the SCHROTH asm harnessbelt. Removal of original equipment restraint systems may also violate applicable State or Federal law.

To carry rear seat passengers, you must use your standard 3-point factory provided front seat belts. To use the factory installed seat belts after a SCHROTH BMW Rallye 4 belt has been installed you must first release (un-clip) all four points of the SCHROTH belt and remove it.

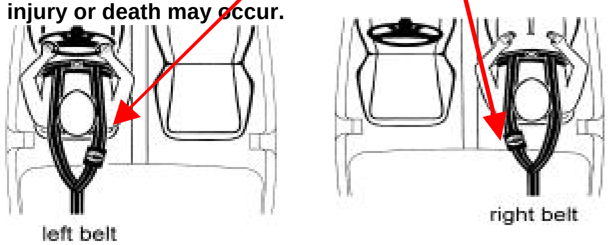
Leaving original equipment restraint systems in place and fully functional will enable you to choose either the SCHROTH Rallye 4 OR the vehicle's standard seat belts when it is necessary to transport passengers in any of the rear seats or when either harness belt is not suited for use by the driver or front seat passenger.

WARNING

On 2-door vehicles the folding front seat backrest will be restricted in their range of motion. Evacuation or rescue of rear seat passengers can be restricted or even impossible after an accident and severe injuries or death may occur.

WARNING

Separate SCHROTH asm harnessbelts are supplied for the left and right sides. The black "asm cartridge" must be on the inboard shoulder strap when system is installed (see illustration). Never install a belt on wrong side of vehicle. System will not function properly in an accident and serious injury or death may occur.



WARNING

Use of improper attachment points will impair system performance.

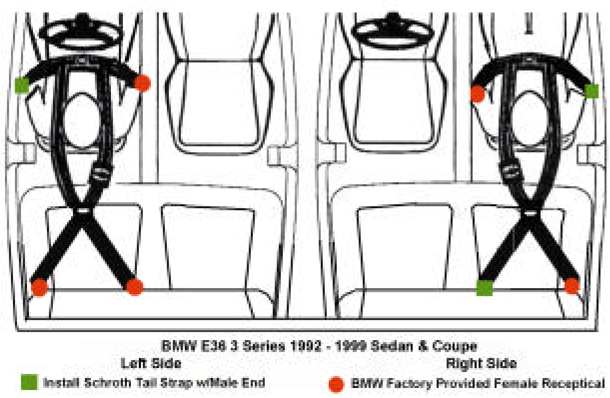
Weak tail strap anchor points will not withstand the forces in an accident and increase the risk of personal injury.

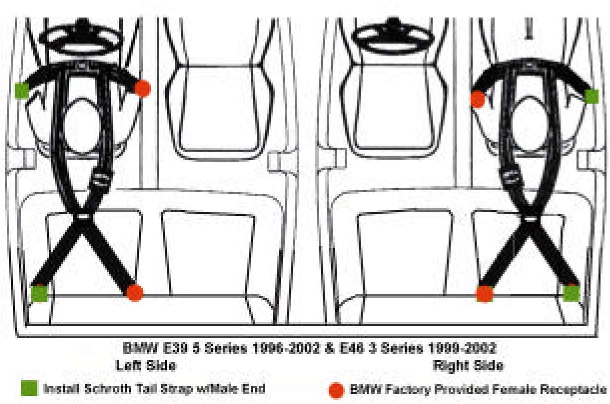
Never attach the tail strap to anchorages intended for the tether straps of child seats that are found on the filler panels behind the rear seats of some passenger cars or the luggage area of some hatchbacks or station wagons. These anchor points are not strong enough to withstand the forces of an accident and are not intended for adult belts.

Harness belt systems may only be installed at suitable anchor points for seat belt systems as originally installed by the vehicle manufacturer.

For suitable anchor points for make, model and model year of your vehicle, see Certified Vehicle List (Vehicle Reference List). If in doubt, ask your dealer to show you where these anchor points are located.

These figures show the general location and suitability of seat belt anchor points installed as standard equipment in specific BMW E36, E46, E39, and MINI model passenger cars.





(The E39/E46 Diagram also applies to the BMW MINI)

Green Squares represent points where SCHROTH provided male connecting tail straps are to be installed at factory mounting points along with factory provided harnessbelts.

Red Circles represent points where the SCHROTH BMW Rallye 4 belts are designed to plug into BMW factory provided seatbelt female receptacles.

⚠ DANGER

THIS SCHROTH BMW RALLYE 4 HARNESSBELT IS ONLY DESIGNED FOR THE DESIGNATED BMW MODEL AS SEWN INTO THE LABEL ON THE HARNESSBELT TAILSTRAP. USE IN ANY OTHER BMW MODEL OR IN ANY OTHER AUTO OF A DIFFERENT MANUFACTURER COULD RESULT IN THE FAILURE OF THE HARNESS SYSTEM AND SERIOUS INJURY.



⚠ DANGER

Never drill or tap or make a new attachment point in the body or chassis in order to mount a SCHROTH harness at that location. Such attachment points are inadequate, may be improperly located and can seriously impair the function and effectiveness of the system.

Please compare the mounting locations on your car with the illustrations on pages 7 and verify the “Model Tag” as pictured above (sewn into the tail strap) matches the model of your vehicle.

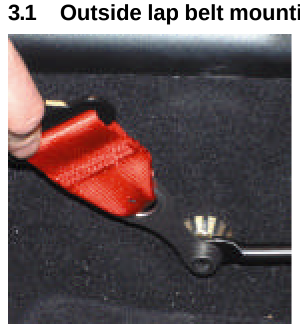
Original equipment belts with swivel attachments must never be bent, modified, impeded or restricted in their range of motion.

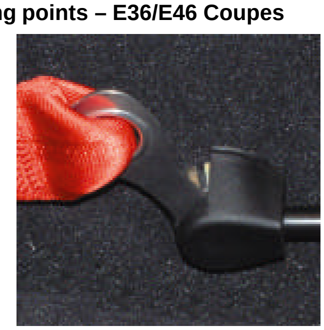
2 Anchorage bolts & SCHROTH Rallye Bolt on bracket

Where additional SCHROTH connecting tails are to be installed (referenced by the Green Boxes on the diagrams on page 7), the SCHROTH connector will be bolted to the a factory mounting point along with the factory belt using the factory provided bolts. You should be able to tighten each bolt a minimum of nine (9) full 360 degree turns. Tighten all anchorage bolts to a torque of 30 ft.lbs. (40 Nm)

3 Installation of the lap belt connectors

3.1 Outside lap belt mounting points – E36/E46 Coupes

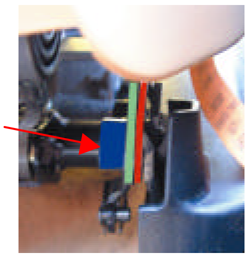


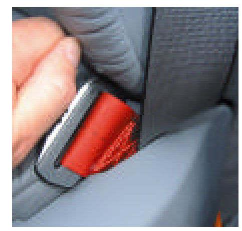


The front outboard lap belt mounting points are located at the front of the metal rail that holds the bottom of the factory seatbelt.

- Pop off the black plastic cap to expose the retaining bolt.
- Using a T50 Torx head socket, back out the bolt. Place the SCHROTH connector just under the bolt head and reinstall the bolt.
- Before tightening the bolt, align the SCHROTH connector so that the webbing is pulling in the same direction that the belt will pass over your lap when connected. Torque the bolt to 30 ft.lbs.
- If desired, trim the plastic cover around the SCHROTH bracket and clip it back over the bolt. A razor blade or wire cutters work well for this task.

3.2 Outside lap belt mounting points – E39 Sedan





- Adjust the electric seat to the forward and raised position giving access to the seat belt mounting bolt.
- Locate the mounting bolt on the outer most rear section of the base of each front seat. The retaining bolt (indicated in blue) faces inward. Remove this bolt using a T50 Torx head socket.
- Feed the SCHROTH lap belt connector down from the top between the side of the seat and the factory belt. (base of the factory belt is indicated in red)
- Replace the bolt placing the SCHROTH bolt-in connector (pictured in green) immediately behind the bolt head and the stock bracket (red) behind the SCHROTH bracket. Torque the bolt to 30 ft.lbs.

3.3 Outside lap belt mounting points – E46 Sedan



- Locate the front outboard lap belt anchor bolt on the rear outside corners of each seat as pictured above. Remove this bolt using a 16mm hex head socket.
- Using a razor blade or wire cutters, trim off the small piece of plastic outlined by the white marks (with the red "X").
- Remount the anchor bolt with the SCHROTH bracket resting immediately under the bolt head and the factory bracket in its original position. Position the

SCHROTH bracket so that the webbing is following the desired path once the lap belt is connected.

- Torque the bolt to 30 ft.lbs.

3.4 Outside lap belt mounting point s – E36 Sedan

- Unbolt the seat from the floor mounts. Move the seat all the way back and remove the front floor mounting nuts using a 16mm socket. Move the seat all the way forward and remove the rear mounting bolts.
- DO NOT REMOVE THE SEAT. Tip the seat in toward the front of the car to expose the BMW anchor bolt at the rear side of the seat-mount bracket.



- Use a razor blade to trim back the plastic as shown in the picture above to allow space for the SCHROTH Lap Belt Tail Strap.
- Using a T50 Torx socket remove the bolt that holds the factory lap belt in place.
- Place the SCHROTH mounting bracket directly beneath the bolt head and reinstall the BMW factory anchor bolt. Torque to 30 ft.lbs.
- Reposition the seat over its mounting point and remount the two front retaining nuts and two rear retaining bolts.

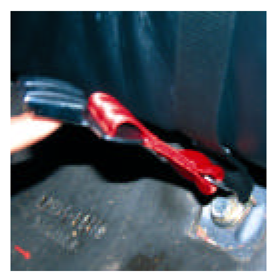
4 Installation of the tail strap connectors

4.1 Tail strap connectors- Left (Drivers Side) Belt All E36 models

- No installation is required. Simply plug the male ends of the SCHROTH harness tail strap into the left most rear seat and the center mounted rear seat BMW factory female receptacles.

4.2 Tail strap connectors- Right (Passenger Side) Belt All E36 models

- Remove rear seat cushion by lifting up firmly on the front edge of the cushion about 8” in from either side.
- Using a 16mm hex socket, remove the anchor bolt holding the rear passenger side lap belt.



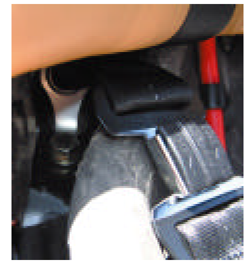
- Using two pair of pliers, carefully bend the SCHROTH bracket so that it fits as shown in the picture to the right.
- Reinstall the BMW factory anchor bolt placing the SCHROTH bracket directly under the bold head and positioned as shown in the picture above.
- Reinstall the rear seat cushion being sure that the SCHROTH tail strap connector is positioned above the top of the seat cushion.

4.3 Tail strap connectors – Left & Right Belts All E39 models

- No installation is required for the inboard mounting points of the tail straps. Simply plug the male ends of each SCHROTH inboard tail strap to their respective BMW factory female receptacles in the center of the rear seat.
- Outer most mounting points require installation of a SCHROTH Tail Strap Connector. Lift out the rear seat cushion by lifting up firmly on the front edge of the cushion 8” in from either side and in the middle.

- Locate and remove (16mm socket) the BMW lap belt anchor bolts at the outside corners just under the rear seatback side bolsters. 16mm socket.

- Bend and mount the SCHROTH tail strap connector as shown in the picture to the right.



- Replace the rear seat bottom cushion being sure that it is "snapped" in place at the three front edge attachment points. The SCHROTH tail strap connector should stick out slightly between the bottom and top cushions.

4.4 Tail strap connectors – Left & Right Belts

All E46 models

- No installation is required for the inboard mounting points of the tail straps. Simply plug the male ends of each SCHROTH inboard tail strap to their respective BMW factory female receptacles in the center of the rear seat.
- Outer most mounting points require installation of a SCHROTH Tail Strap Connector. Lift out the rear seat cushion by lifting up firmly on the front edge of the cushion about 8" in from either side and in the middle.
- Locate the BMW lap belt anchor bolts at the outside corners just under the bottom edge of the rear seatback side bolsters. On some cars it is possible to "lift up" the lower outside corner of the side bolster to gain access to the BMW anchor bolt. In other cars it may be necessary to remove the rear seat back side bolsters. Please see instructions on page 12
- Remove the bolt using a T50 Torx head socket.
- Mount the tail strap connector as shown in the picture to the right. With the bolt slightly loose, gently pull up on the SCHROTH webbing allowing the mounting bracket to bend slightly so that it is angled in the direction that the belt will be pulling and will pass easily between the two seat cushions.

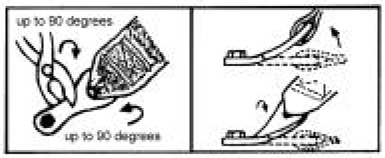


- Replace the rear seat bottom cushion being sure that it is "snapped" in place at the three front edge attachment points. The SCHROTH tail strap connector should stick out slightly between the bottom and top cushions.

5 Flexible range of the seat belt mounting brackets

WARNING

Repeated bending could weaken the bracket and cause it to fail when loaded in an accident.
Never bend the bracket back and forth several times.
Any pivoting brackets of the stock 3-point belts must not be limited in their range of motion.



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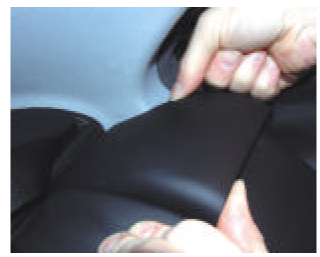
5 Removal of E46 Rear Seatback Side Bolster

These instructions were written using an E46 M3 with electric rear window option. If your vehicle does not have electric rear windows the bolster removal will be slightly different. If you have any questions please call: MDI/Schroth USA at: (800) 884-2358.

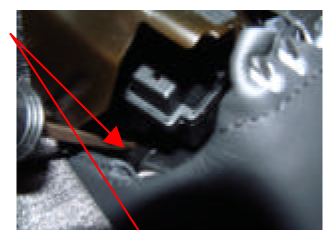
- ❑ With the ignition on, open the electric rear windows.
- ❑ Remove rear seat cushion by lifting up firmly on the front edge of the cushion about 8" in from either side.
- ❑ If the rear seat back folds down, do it now.
- ❑ Move the rear shoulder belt so that it wraps inboard around the rear headrest. This will keep it out of the way for removal of the rear seat back side bolster.
- ❑ Remove the black plastic circular cap from the outboard seat back bolster by prying the top middle with a small flat head screwdriver. (Only if you have electric rear windows.)



- ❑ With your thumbs under the front of the square black plastic cover, push up and towards the back to disengage this from the seat back bolster. This is to expose the male mounting tab that holds the top of the seat back bolster to the vehicle (coupe only).



- ❑ Using long flat head screwdriver, push down on the top of the mounting clip attached to the back of the side bolster. this mounting clip down. This will take some force as this is the only thing holding the top of this bolster in place. As you push this clip down, pull the top of the bolster away from the vehicle while being careful not to break the male clip on the bottom of the bolster (see image at right). Once this is disengaged the seat back bolster can be removed. To do this you will need to wiggle the bolster slightly while pulling up. *(NOTE: If you should break the male plastic bolster mounting tab at the top you can pick one up at your local BMW dealer for under $5.00. Part number 52 20 8 099 555)*





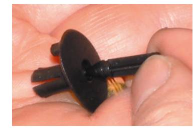
6 Reinstallation of E46 Rear Seatback Side Bolster

- ❑ Holding the bolster at an angle, top facing to the front, insert the outside lower corner pin into the frame rail. And rotate the unit towards the inside so

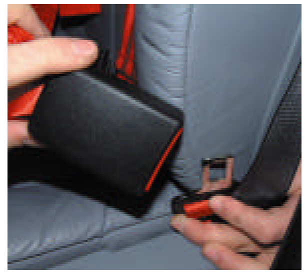


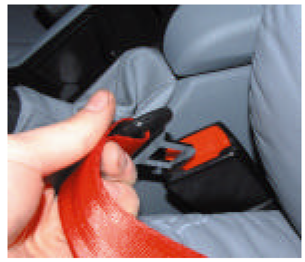
that the lower inside male clip fits into the metal D-ring on the chassis. (pictured above).

- If you can not get the bottom inside clip in place you can simply break it off (if it is not already broken). Do not worry about this as the bottom seat cushion holds the bottom of the bolster firmly in place.
- Push in the top of the side bolster to the upper mounting point.
- To reinstall the black plastic cap to the top of the bolster, you have to pop out a plastic pin from the top of the cap. This pin should be pushed or pulled up to reinstall the cap and than pushed down to lock the cap back onto the car. Once this is done you can reinstall the black circular finishing cap to the side of the top cap.



OPERATING INSTRUCTIONS





1 General instructions

Most states require that all passengers wear seat belts when a car is in motion. Please check with your local authorities for further information! Regardless of the law in your State, it only makes sense to buckle up, so before you start your car, make sure that you and all of your passengers are properly restrained.

The SCHROTH asm harnessbelt system when properly installed and used according to applicable instructions can mitigate injury. Of course, the ability of any restraint system to mitigate or prevent injury is directly related to the type and severity of the accident.

WARNING

This product is not designed and tested to be used with HANS® or other head and neck restraints e.g. Hutchens device.
Shoulder belts may slip off the HANS® and crotch straps e.g. of a Hutchens device cannot be properly attached to the lap belt. Malfunction can result in serious personal injuries or death.

The following pictures show the correct installation and use of SCHROTH asm harnessbelts:

2 Clip-in Clip-out attachment points

BMW E46 Coupe- all attachment points



**BMW E36/E46 Coupe-
Front Outside
LapBelt Mount**



To secure the SCHROTH outside lap belt - plug in the SCHROTH female end of the lap belt to the male end of the connecting strap installed as pictured above.

BMW E39 Sedan (Similar for E46 Sedan)
Outside front mounting points. Schroth male lap belt connector is mounted so that it comes up to the inside of the factory belt. It is bolted using the same factory bolt.

BMW All Models
Inside front lap belt mount
Simply plug the SCHROTH harness male connector into the BMW factory female receptacle.

E36 Left Side Tail Strap Attachments
Plug both tail straps of the SCHROTH belt with the BMW style male ends into the BMW Factory Female receptacles at the far left hand side (next to the door) and in the center of the rear seat.

E36 Right Side Tail Strap Attachments
Plug the outside (far right) tail strap of the SCHROTH belt with the BMW style end into the outside (far right) BMW factory female receptacle. The inside tail strap with the SCHROTH male end plugs into the SCHROTH female connector bolted in the center of the rear seat.

⚠ WARNING

Improper use of any seatbelt can cause serious personal injury or death.
To help reduce the risk of serious injury in an accident:

- **Never strap more than one person in place, with each harness system.**
- **Never wear the harness system at the same time as the original equipment seat belts.**
- **Never use the lap belt portion of the harness system without the shoulder belts.**
- **Always make sure that lap belt and shoulder belts are not twisted when worn.**
- **Never use the harness belt system for children under the age of 12 years or to install an infant seat or child seat.**
- **Never use the harness belt system for persons who weigh less than 88 lbs or those who are less than 4`11" tall, regardless of age.**
- **Always wear the lap belt portion of the harness system low and tight across the pelvis. This is also recommended for the stock 3-point belt whenever it is worn.**
- **Never wear the belts over heavy clothing as it can interfere with proper positioning and adjustment of the belts, reducing the overall effectiveness of the system.**
- **Never wear the belts over rigid or breakable objects in or on your clothing, such as eye glasses, pens, jewelry keys etc. as these may cause injury.**
- **Never allow lap or shoulder belts to rub against sharp objects.**
- **Never allow the belts to be damaged by becoming caught in door or seat hardware.**

3 Adjustment of the seating position

Choose your most comfortable seating position for safe driving.

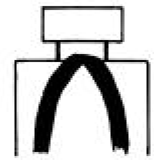
<u>Driving and safety instructors recommend:</u>

"Select your seating position in the vehicle so that you can fully grip the upper edge of the steering wheel with your elbow still slightly bent and without moving your upper body from the seatback. With the clutch (automatic transmission-brake) fully depressed your knee should still be slightly bent."

Remember: A "laid back" seating position might look 'cool', but does not contribute in any way to better or safer handling of your vehicle! No racing or rallye driver is "laid back" in his vehicle!

4 Routing of the shoulder belts

For BMW vehicles specified for use with these SCHROTH BMW Rallye 4 Belts, the shoulder belts must be routed between the head rest posts.



5 How to close and release the buckles

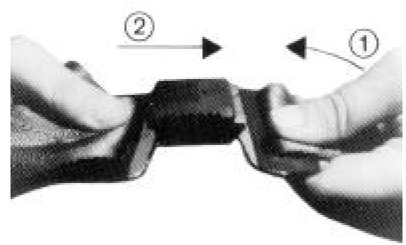
5.1 Lap belt buckle and all "Click-In" points where the standard BMW Female Receptacle is used.

<u>To close:</u> Insert the latch into the buckle until you can hear a distinct clicking sound.

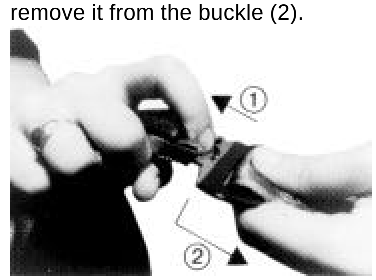
<u>To open:</u> Depressing the red button marked "PRESS" will open the buckle.

5.2 Buckle between tail strap and shoulder belts (separation buckle).

<u>To close:</u> Insert the latch underneath the plastic cover until it locks in (1) and the plastic cover slides back into its normal position (2).



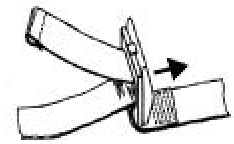
<u>To open:</u> Slide the plastic cover in the direction of the arrow to the stop (1). Tilt the latch downwards and remove it from the buckle (2).



6 How to adjust the belt

6.1 Lengthen the belt

Hold the adjuster at right angles - 90° - to the belt and pull in direction of the arrow (see illustration beside).



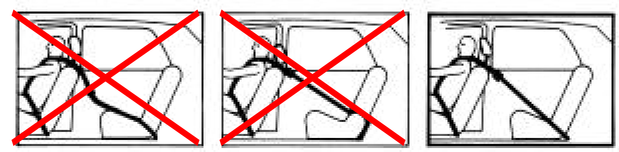
6.2 Shorten the belt

Pull the end of the strap in direction of the arrow (see illustration beside).



SCHROTH offers accessory adjusting grips which can make the adjustment even more convenient (see page 37, Accessories).

7 Adjustment of the headrest and initial adjustment of the tail strap



wrong way	wrong way	**right way**
Belts must not have any sag.	The tail strap must not be misdirected by upholsteries or the rear seat cushions.	**The headrest is properly adjusted and the shoulder belts can move freely without slack.**

a) After choosing the correct seating position, put the belt on and adjust the lap belt so it fits tightly in the bend between the pelvic crest and the upper thigh. The release buckle should be located in the center in front of your body. If necessary, lengthen the tail strap first.

b) Next adjust the shoulder belts: Make sure there is approx. 4 inches (10 cm) of loose belt protruding from each shoulder belt adjuster.

c) One of the two shoulder belts should now be tight against the shoulder; the other shoulder belt should be looser.

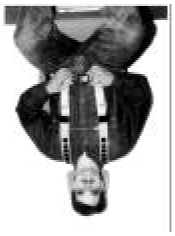
d) Tighten the looser shoulder belt until both shoulder belts have the same pressure over the shoulders and in the chest area.

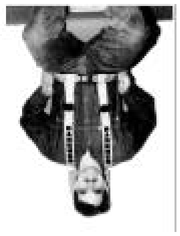
Make sure the shoulder straps are properly adjusted whenever the SCHROTH harnessbelt is worn.

For lap belt adjustment see following paragraph.

8 Putting on the belt

a) After choosing the correct seating position, put on the belt and adjust the lap belt so it fits tightly in the bend between the pelvic crest and the upper thigh. The release buckle should be located in the center in front of your body.


close buckle


tighten lap belt

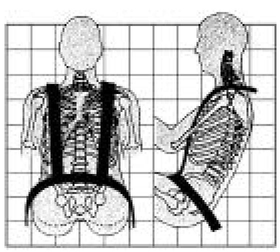

W R O N G

⚠ WARNING

Improper fit of any lap belt can cause serious personal injury or death.

- **ALWAYS make sure that the lap belt is tightly adjusted. A lap belt in a harness or 3-point system that is too loose will impair the performance of the system.**
- **The lap belt must fit tightly in the bend between the pelvic crest and the upper thigh!**
- **Make sure belt is properly adjusted when a different person uses the belt or each time the seat is readjusted.**

(Heed WARNING on adjuster.)





SAFETY INSTRUCTIONS

- In order to get an even tighter fit of the lap belt, we recommend that you move your seat back a little, adjust the length of your belt as described above and move the seat forward to its normal position. This will help to tighten the lap belt even more. This recommendation applies only to two door coupe models where one lap belt mounting point s is attached directly to the chassis.

b) Adjust the length of the inboard shoulder belt until both belts exert equal pressure against the upper torso.

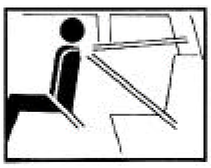

equal pressure
R I G H T


W R O N G

9 Use of the rear seats

⚠ WARNING

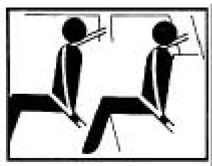
Never wear the SCHROTH harnessbelt if any rear seating position is occupied. Both front seat occupants must then use original equipment 3-point belts. The rear seat occupant could interact with the tail strap of the SCHROTH harnessbelt during an accident and cause serious injury to himself or to the wearer of the harness belt.



right way



wrong way



right way

SAFETY INSTRUCTIONS

- As a constant reminder, the enclosed transparent sticker must be attached to the rear side window in a prominent place. The sticker cannot be removed without damage to chromate tinted glass. On such vehicles, you may affix the transparent sticker at a different, prominent location so that it will serve as a constant reminder.

10 Stowing the belts when not in use

If you use the stock 3-point belt instead of the SCHROTH harnessbelt, be sure to properly stow the SCHROTH harness belt so that it is not exposed to seat tracks, liquids, sun light, or any other area where the belt could possibly be damaged.

When not in use we recommend that you unhook all four points are remove the entire belt for proper storage.

CARE and MAINTENANCE

1 Inspection

Check the safety belt once a month for any damage. Cuts, tears and other damage to the belt will greatly reduce its effectiveness. Replace the belt or damaged parts immediately with original Spare Parts (see page 37, Spare Parts). Never use a damaged harness belt, use the standard 3-point belts which remain available for use.

Make sure the buckles are free of any obstruction and lock securely.

⚠ WARNING

Modified belts or such belts that have been resewn are not strong enough and are dangerous in an accident.
Never modify, disassemble or repair the belts yourself.
For parts that can be replaced, use only original SCHROTH Spare Parts.
Only original SCHROTH Accessories may be used with the harness belt system.
Use of non-authorized parts and Accessories can reduce the effectiveness of the harness belt system.

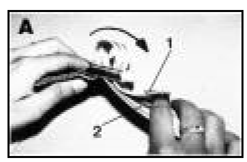


Figure A:
Fold the strap to a loop and insert it upwards throughout the metal frame and turn the loop as indicated.

Note:
The strap part protruding from the adjuster for further adjustment [1] must be located above the stress taking strap [2].

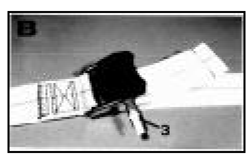


Figure B:
Position the plastic cover on top of the loop and insert the metal retainer [3] through the guides of the plastic cover and the strap loop.

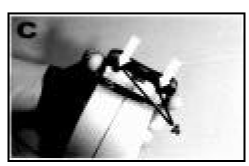


Figure C:
Keep the metal retainer positioned between your thumb and forefinger. Slide the plastic cover backwards onto the metal frame as indicated until both ratchets [4] locks with a distinct clicking sound into the detentions in the metal frame.

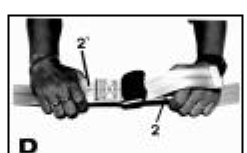


Figure D:
Check by pulling both stress taking straps [2] and [2`] the adjustment device will lock safely.

SAFETY INSTRUCTIONS

- Any changes made to the belt will automatically void the warranty.

WARNING

Never use any restraint system that does not function properly. If questions arise, immediately contact your importer or the manufacturer!

2 Accident

WARNING

A safety belt which was in use during an accident has been weakened and is unfit for further use and must be replaced!

SAFETY INSTRUCTIONS

- One indication that the belt was exposed to excess strain and therefore requires replacement is when the stitches of the asm-system are ripped open and are protruding from underneath the asm-plastic cover.

WARNING

**A restitched asm seam is dangerous.
The asm energy conversion device may not be restitched under any circumstances.**

After an accident, in addition to replacing seat belt which were in use, also be sure to ask your car dealer for carefully check all seatbelt attachment points for deformation or cracks. Always make sure that the guidelines of the car manufacturer are followed if a repair is necessary.

3 Re-assembling the length adjuster

WARNING

We do not recommend to disassemble the length adjuster during installation process. Even to run the harness belt through the openings at racing seats disassembling is not necessary.

If for any reason the length adjuster is disassembled, strictly follow the procedure step by step as described below to re-assemble the adjuster.

4 Cleaning

To clean the belt, use soap and warm water. Do not use any solvents! Do not dry the belt in the sun or near a radiator.

WARNING

Improper cleaning or drying of the harness belts can weaken them, reduce their effectiveness and can result in serious personal injury or death.

5 Installation Accessories

Color key:
black=0, blue=1, red=2, yellow=3, purple=5, green=8
The **X** in PINs must be substituted by the color key of the color you want to order!

Shoulder belt pads, pair of	black with yellow flock printing	00109
Shoulder belt pads, pair of	blue with black flock printing	01109
	red, yellow, purple, green with black flock printing	0**X**109
Shoulder belt pads, pair of	black with grey flock printing	09109
Shoulder belt pads, pair of	silvergrey w. black flock printing	09209
Shoulder belt pads, pair of	black with black flock printing	09309
Adjusting grips for length adjuster, 4 pcs./package		00092

6 Spare Parts

If any part of your harness needs replacement, please contact your nearest dealer. USE ONLY GENUINE SCHROTH PARTS.

Cover for adjuster inclusive retainer	01084

We reserve the right to incorporate any technical changes or further development in this product without notice.

If you need additional information or have any comments or questions about the SCHROTH asm harnessbelts, please contact your dealer or the importer.
[see **www.schroth.com**]

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Peabody, MA 01960
Toll Free (888) 536-8550
Phone (978) 532-1145
Fax (978) 532-2016

To locate you nearest dealer call:
(800) 884-BELT

REMEMBER:

For safety's sake, always buckle up.

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